

**IN THE CLAIMS:**

1. (Currently Amended) A spinal implant adapted for non-linear insertion in an intradiscal space, comprising:
  - a leading end wall defining an implantation direction of the spinal implant;
  - a trailing end wall opposite said leading end wall having an insertion tool engaging portion;
  - a posterior wall extending between said leading end wall and said trailing end wall; an anterior wall extending between said leading end wall and said trailing end wall; and at least one strut extending between said posterior wall and said anterior wall, wherein said posterior wall has a height that is less than the height of said anterior wall and includes at least one opening extending therethrough, said at least one opening being centrally positioned between said leading end wall and said trailing end wall.
2. (Original) The implant of claim 1, wherein said trailing end wall and said leading end wall each have a height that is less than the height of both said anterior wall and said posterior wall.
3. (Original) The implant of claim 1, wherein said posterior wall is concave and said anterior wall is convex.
4. (Original) The implant of claim 1, wherein said leading end wall and said trailing end wall have the same height.
5. (Original) The implant of claim 1, further comprising:
  - an upper bearing member extending between and connected to said leading end wall, said anterior wall, said posterior wall and said trailing end wall; and
  - an opposite lower bearing member extending between and connected to said leading end wall, said anterior wall, said posterior wall and said trailing end wall.

---

Response to Final Office Action  
Serial No. 10/721,642  
Attorney Docket No. MSD1-263/PC401.15  
Page 2 of 26

6. (Original) The implant of claim 1, wherein said leading end wall includes an insertion tool engaging portion.

7. (Previously Presented) The implant of claim 1, wherein said insertion tool engaging portion is an internally threaded hole formed through said trailing end wall.

8. (Currently Amended) A spinal implant, comprising:  
a leading end wall defining an implantation direction of the spinal implant;  
a trailing end wall opposite said leading end wall;  
a posterior wall extending between said leading end wall and said trailing end wall;  
an anterior wall extending between said leading end wall and said trailing end wall;  
an upper bearing member extending between and connected to said leading end wall, said anterior wall, said posterior wall and said trailing end wall; and  
an opposite lower bearing member including a lower strut and extending between and connected to said leading end wall, said anterior wall, said posterior wall and said trailing end wall, wherein said upper bearing member and said lower bearing member each include a cantilevered portion extending beyond said anterior wall.

9. (Previously Presented) The implant of claim 8, wherein said anterior wall includes a first anterior lateral opening adjacent said leading end wall and a second anterior lateral opening adjacent said trailing end wall.

10. (Original) The implant of claim 9, wherein:  
said first anterior lateral opening is defined between a first vertical strut, said leading end wall and said upper and lower bearing members;  
said second anterior lateral opening is defined between a second vertical strut, said trailing end wall and said upper and lower bearing members; and  
said anterior wall further including a middle opening defined between said first strut, said second strut, and said upper and lower bearing members.

11. (Original) The implant of claim 10, further comprising an offset strut adjacent said middle opening and offset towards said posterior wall, said offset strut extending between said upper bearing member and said lower bearing member.

12. (Original) The implant of claim 8, wherein said anterior wall has a height that is greater than a height of said posterior wall, and said trailing end wall is adapted for coupling to an insertion tool.

13. (Currently Amended) The implant of claim 8, wherein: said upper bearing member includes an upper strut and a pair of openings on either side of said upper strut; and said lower bearing member includes ~~a lower strut~~ and a pair of openings on either side of said lower strut.

14. (Original) The implant of claim 8, wherein:  
said upper bearing member includes a number of grooves formed in an upper bearing surface thereof; and  
said lower bearing member includes a number of grooves formed in a lower bearing surface thereof.

Claims 15-49 (Cancelled)

50. (Previously presented) The implant of claim 5, wherein said upper bearing member and said lower bearing member each include a cantilevered portion extending beyond said anterior wall.

51. (Previously presented) The implant of claim 50, wherein said anterior wall includes a first anterior lateral opening adjacent said leading end wall and a second anterior lateral opening adjacent said trailing end wall.

52. (Previously presented) The implant of claim 51, wherein:

---

Response to Final Office Action  
Serial No. 10/721,642  
Attorney Docket No. MSDI-263/PC401.15  
Page 4 of 26

said first anterior lateral opening is defined between a first vertical strut, said leading end wall and said upper and lower bearing members;

said second anterior lateral opening is defined between a second vertical strut, said trailing end wall and said upper and lower bearing members; and

said anterior wall further including a middle opening defined between said first strut, said second strut, and said upper and lower bearing members.

53. (Previously presented) The implant of claim 52, further comprising an offset strut adjacent said middle opening and offset towards said posterior wall, said offset strut extending between said upper bearing member and lower bearing member.

54. (Currently Amended) A spinal implant, comprising:

a leading end wall defining an implantation direction of the spinal implant;

a trailing end wall opposite said leading end wall;

a posterior wall extending between said leading end wall and said trailing end wall;

an anterior wall extending between said leading end wall and said trailing end wall;

an upper bearing member including an upper strut and extending between and connected to said leading end wall, said anterior wall, said posterior wall and said trailing end wall; and

an opposite lower bearing member extending between and connected to said leading end wall, said anterior wall, said posterior wall and said trailing end wall, wherein said anterior wall includes at least one strut positioned between openings on each side thereof, and said upper bearing member and said lower bearing member each include a cantilevered portion extending beyond said strut and said openings.

55. (Previously presented) The implant of claim 54, wherein said openings in said anterior wall include a first anterior lateral opening adjacent said leading end wall and a second anterior lateral opening adjacent said trailing end wall.

56. (Previously presented) The implant of claim 55, wherein:

said at least one strut includes a first vertical strut and a second vertical strut;

---

Response to Final Office Action

Serial No. 10/721,642

Attorney Docket No. MSDI-263/PC401.15

Page 5 of 26

said first anterior lateral opening is defined between said first vertical strut, said leading end wall and said upper and lower bearing members;

said second anterior lateral opening is defined between said second vertical strut, said trailing end wall and said upper and lower bearing members; and

said anterior wall further including a middle opening defined between said first strut, said second strut, and said upper and lower bearing members.

57. (Previously presented) The implant of claim 56, further comprising an offset strut adjacent said middle opening and offset towards said posterior wall, said offset strut extending between said upper bearing member and said lower bearing member.

58. (Previously presented) The implant of claim 54, wherein said anterior wall has a height that is greater than a height of said posterior wall, and said trailing end wall is adapted for coupling to an insertion tool.

59. (Currently Amended) The implant of claim 54, wherein:

said upper bearing member includes ~~an upper strut and~~ a pair of openings on either side of said upper strut; and

said lower bearing member includes a lower strut and a pair of openings on either side of said lower strut.

60. (Previously presented) The implant of claim 54, wherein:

said upper bearing member includes a number of grooves formed in an upper bearing surface thereof; and

said lower bearing member includes a number of grooves formed in a lower bearing surface thereof.

61. (Currently Amended) A spinal implant adapted for non-linear insertion in an intradiscal space, comprising:

a leading end wall defining an implantation direction of the spinal implant;

---

Response to Final Office Action  
Serial No. 10/721,642  
Attorney Docket No. MSDI-263/PC401.15  
Page 6 of 26

a trailing end wall opposite said leading end wall;  
a posterior wall extending between said leading end wall and said trailing end wall;  
an anterior wall extending between said leading end wall and said trailing end wall;  
an upper bearing member extending between said leading end wall, said anterior wall,  
said posterior wall and said trailing end wall; and

an opposite lower bearing member extending between said leading end wall, said anterior wall, said posterior wall and said trailing end wall, wherein the implant has a center axis extending generally in the direction between said leading end wall and said trailing end wall, said posterior wall and said anterior wall being positioned on opposite sides of said center axis, wherein said trailing end wall and said leading end wall each have a height between said upper and lower bearing members that is less than the height of both said anterior wall and said posterior wall between said upper and lower bearing members, and said anterior wall has a height between said upper and lower bearing members greater than a height of said posterior wall between said upper and lower bearing members.

62. (Previously presented) The implant of claim 61, wherein said upper bearing member and said lower bearing member each include a cantilevered portion along said anterior wall.

63. (Previously presented) The implant of claim 61, wherein said leading end wall and said trailing end wall are each offset from said center axis in the direction of said posterior wall.

64. (Previously presented) The implant of claim 61, wherein said posterior wall is concave and said anterior wall is convex.

65. (Currently Amended) The implant of claim 61, wherein said leading end wall and said trailing end wall have the same height between said upper bearing member and said lower bearing member.

66. (Currently Amended) A spinal implant adapted for non-linear insertion in an intradiscal space, comprising:

---

Response to Final Office Action  
Serial No. 10/721,642  
Attorney Docket No. MSDI-263/PC401.15  
Page 7 of 26

a leading end wall defining an implantation direction of the spinal implant;  
a trailing end wall opposite the leading end wall;  
a posterior wall extending between said leading end wall and said trailing end wall;  
an anterior wall extending between said leading end wall and said trailing end wall;  
an upper bearing member extending between said leading end wall, said anterior wall,  
said posterior wall and said trailing end wall;  
an opposite lower bearing member extending between said leading end wall, said anterior  
wall, said posterior wall and said trailing end wall, wherein:

the implant has a center-axis extending generally in the direction between said  
leading end wall and said trailing end wall, said posterior wall and said anterior wall  
being positioned on opposite sides of said center axis;

said trailing end wall and said leading end wall each have a height between said  
upper and lower bearing members that is less than the height of both said anterior wall  
and said posterior wall between said upper and lower bearing members, and said anterior  
wall has a height between said upper and lower bearing members greater than a height of  
said posterior wall between said upper and lower bearing members; and

said anterior wall includes at least one strut positioned between openings on each  
side thereof, and said upper bearing member and said lower bearing member each include  
a cantilevered portion extending beyond said strut and said openings.

67. (Previously presented) The implant of claim 66, wherein said openings in said  
anterior wall include a first anterior lateral opening adjacent said leading end wall and a second  
anterior lateral opening adjacent said trailing end wall.

68. (Previously presented) The implant of claim 67, wherein:

said at least one strut includes a first vertical strut and a second vertical strut;

said first anterior lateral opening is defined between said first vertical strut, said leading  
end wall and said upper and lower bearing members;

said second anterior lateral opening is defined between said second vertical strut, said  
trailing end wall and said upper and lower bearing members; and

said anterior wall further including a middle opening defined between said first strut, said second strut, and said upper and lower bearing members.

69. (Previously presented) The implant of claim 68, further comprising an offset strut adjacent said middle opening and offset toward said posterior wall, said offset strut extending between said upper bearing member and said lower bearing member.

70. (Previously presented) The implant of claim 66, wherein said posterior wall is concave between said leading and trailing end walls and said anterior wall is convex between said leading and trailing end walls.

---

Response to Final Office Action  
Serial No. 10/721,642  
Attorney Docket No. MSDI-263/PC401.15  
Page 9 of 26